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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,201	03/02/2004	Satoru Watanabe	500.43555X00	1026
24956	7590	10/30/2006		
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314				
			EXAMINER CRAIG, DWIN M	
			ART UNIT 2123	PAPER NUMBER

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,201

Applicant(s)

WATANABE, SATORU

Examiner

Dwin M. Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/2/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-6 have been presented for examination.

Specification

2. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because the specification contains numerous examples of improper English language, for example:

Page 1 lines 4 & 5, "*As a problem concerning a job execution plan, for example, there is a problem of job scheduling.*" The sentence should read, *Concerning job execution plans; there is the problem of job scheduling*, passive voice and awkward sentence construction.

Page 2 lines 4-6, "*Accordingly, for evaluating the execution plan in the multi-task environment, discrete event simulation is widely used.*" The word *Multi-task* should be replaced with *Multi-tasking*, incorrect tense of a pronoun,

Page 3 lines 1-4, "*For this, a great time is required for the simulation execution, and there is a case that the execution plan evaluation is not completed within a time practically required.*" The sentence should read, "*For this, a great amount of time is required for simulation execution...*", there is a lack of a proper adverb.

Page 3 lines 16-18, "*The degree of matching between the simulation and the fact (simulation accuracy) varies according to the simulation model.*" The Applicant was trying to disclose that simulation accuracy improves with better simulation models, however the current sentence is very confusing and fails to clearly convey what is being described,

Page 3 lines 24-26, "*When modifying the simulation model, lowering of the simulation accuracy should be suppressed as a second object.*" the preceding text fails to define what the *first object* is and therefore this sentence makes no sense.

2.1 A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

2.2 A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

2.3 The use of the trademark HYPERFORMIX® has been noted in this application as disclosed on page 2 of the specification. It should be capitalized wherever it appears and be accompanied by the generic terminology. Further, the examiner notes that HYPERFZORMIX® is a registered trademark and as such should display the registered trademark symbol ®.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claims Objections

3. Claim 5 is objected to because of the following limitation, *the model creation section calculates the job interference degree*, there appears to be a lack of antecedent basis for the phrase *job interference degree*.

Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,560,569 Abu El Ata, in view of US Patent 5,828,867 Pennell.

4.1 As regards independent claim 1, *Abu El Ata* teaches, *An evaluation system for evaluating a job execution plan by using a simulation, comprising: an input section enabling input of the job execution plan*

(Figure 1 reference 12 and Figure 2 reference 200 and Figure 3 references 12 & 16 and Figure 4 reference 200 and Col. 2 lines 17-18 and Col. 3 lines 48-52 and the descriptive text regarding the cited references in the cited figures)

the functional equivalent of *and a model database for storing a job model;*

(Figure 1 reference 22 and Figure 3 reference 50 and Figure 7 reference 22 and Col. 1 lines 56-67 and Col. 2 lines 33-36 and Col. 2 lines 58-61, "...includes providing a library of hardware and software components..." a *library of models* is functionally equivalent to a *database of models* and Col. 7 lines 24-27),

a model creation section for creating a simulation model from the job model stored in the model database;

(Figure 1 reference 18 and all of Figure 2 and Figure 3 reference 18 and Figure 5 reference 308 and Col. 3 line 49 and Col. 4 lines 53-67 and Col. 5 lines 1-24, "...The construction module 18 then constructs additional models 22..." and Col. 7 lines 28-42)

an evaluation section for evaluating the execution plan;

(Figure 1 reference 24 and Figure 3 reference(s) 18, 42 and 24 all of Figure 5 and Figure 6 reference 412 and Figure(s) 7-9 and all of the descriptive text including, Col. 2 lines 10-16 and

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Col. 2 lines 42-67 and Col. 3 lines 48-58 and Col. 5 lines 1-67 and Col. 6 lines 1-63 and Col. 7 lines 42-67 and Col. 8 lines 1-40)

and an output section for outputting the evaluation result

(Figure 1 reference(s) 26 and 28, Figure 2 reference 220 and Figure 3 reference 62 and 28 and all of the descriptive text therein including, Col. 2 line 22-24 "...an output module for outputting the models and their performance metrics...").

However, *Abu El Ata* does not expressly disclose, *a limit time or a simulation execution section for executing the simulation.*

Pennell discloses *a limit time*

(Figure 2 reference(s) 34, 36, 38, 40, 42 & 44 and the descriptive text and Col. 4 lines 1-61 and specifically, Col. 4 line 41, "...the time required must e entered...")

and a simulation execution section for executing the simulation

(Col. 1 lines 15-23 and Col. 4 lines 8-18, note line 13 "SES/workbench" this is the same modeling and simulation methodology disclosed in Applicant's specification).

Abu El Ata and *Pennell* are analogous art because they are from the same problem solving area of model creation and improvement for use in a simulation.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have used the task time simulation template methods of *Pennell* with the model improvement method of *Abu El Ata*.

The suggestion for doing so would have been, to provide a method for preparing a discrete event simulation program that eliminates the need to re-design, re-compile, re-build, and debug

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the simulation program each time new processes, products, or manufacturing technique(s) <sic> is analyzed, *see Pennell* (Col. 2 lines 40-45).

Therefore, it would have been obvious to combine *Pennell* with *Abu El Ata* to obtain the invention as specified in claims 1-6.

4.2 As regards dependent claim 2, *Abu El Ata* discloses, an evaluation system, *further comprising a performance storage section for storing a performance value of a computer executing the simulation.* (Figure 3, note references to items 24, 46 & 50, the performance metrics are stored in the component library see also, Col. 4 lines 53-67 and Col. 5 lines 1-67 and Col. 6 lines 1-27).

4.3 As regards dependent claim 3, *Abu El Ata* does not expressly disclose, *wherein the model creation section modifies the method for creating the simulation model according to the limit time input to the input section and the performance value stored in the performance storage section.*

However, *Pennell* teaches, (Figure(s) 1 & 2 and the descriptive text, more specifically, Col. 3 lines 41-67 and Col. 4 and Col. 5 lines 1-60 see also Col. 3 lines 19-40, see also Col. 6 lines 35-56).

4.4 As regards dependent claim 4, *Abu El Ata* does not expressly disclose, *wherein the model creation section modifies the method for creating the model so that the time required for executing the simulation of the simulation execution section is equal to or below the limit time input to the input section.*

However, *Pennell* teaches, (Figure(s) 1 & 2 and the descriptive text, more specifically, Col. 3 lines 41-67 and Col. 4 and Col. 5 lines 1-60, see also Col. 3 lines 19-40, see also Col. 6 lines 35-56).

4.5 As regards dependent claim 5, *Abu El Ata* does not expressly disclose, wherein *the method for creating the simulation model from the job model by the model creation section includes a step of setting a parameter of the simulation model and the model creation section calculates the job interference degree from the execution plan input to the input section and modifies the simulation model parameter according to the interference degree calculated.*

However, *Pennell* discloses, (Col. 1 lines 61-67 and Col. 2 lines 1-5, "...with the predetermined parameters...").

4.6 As regards dependent claim 6, *Abu El Ata* discloses, *wherein the output section outputs the simulation model created by the model creation section* (Figure 1 reference(s) 26 and 28, Figure 2 reference 220 and Figure 3 reference 62 and 28 and all of the descriptive text therein including, Col. 2 line 22-24 "...an output module for outputting the models and their performance metrics...").

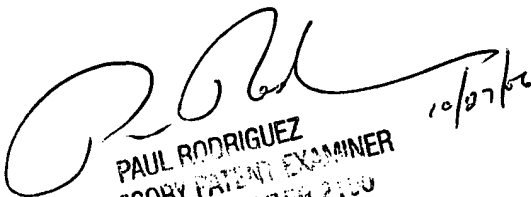
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dwin McTaggart Craig


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10/27/02